



UNITED STATES PATENT AND TRADEMARK OFFICE

ml

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/815,170	03/31/2004	Daniel Nahon	21819-205U	7120

31292 7590 03/15/2007
CHRISTOPHER & WEISBERG, P.A.
200 EAST LAS OLAS BOULEVARD
SUITE 2040
FORT LAUDERDALE, FL 33301

EXAMINER

GIBSON, ROY DEAN

ART UNIT	PAPER NUMBER
----------	--------------

3739

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/15/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/815,170

Applicant(s)

NAHON, DANIEL

Examiner

Roy D. Gibson

Art Unit

3739

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 April 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 3/31/04 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>3/31/2004</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

Claim 12 is objected to because of the following informalities: in line 2, "using" or "with" should be deleted. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 5, 6 and 9-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Dobak et al. (6,241,722).

As to claims 1-3, Dobak et al. disclose a method of treating an arrhythmia of the heart comprising the step of cooling selected cardiac nerves; wherein the selected cardiac nerves include nerves associated with a posterior surface of the left atrium of the heart; and wherein the selected cardiac nerves include sympathetic nerves proximate the Ligament of Marshall (col. 7, lines 31-54, col. 15, lines 64-col. 16, line 45 and col. 17, lines 8-col. 18, line 3).

As to claims 5 and 6, Dobak et al. further disclose wherein the step of cooling is accomplished at a temperature of approximately -80 degrees Celsius, and wherein the selected cardiac nerves are approached endocardially (also see claims 103 and 120).

As to claims 9-12, Dobak et al. further disclose, wherein the selected cardiac nerves are ablated so that nerve signal conduction is permanently inhibited; further comprising the step of cold mapping cardiac tissue prior to the step of cooling; a method of treating an arrhythmia of the heart comprising the step of cooling selected cardiac nerves to a temperature below -30 degrees Celsius until nerve signal conduction in the selected cardiac nerves is at least temporarily inhibited; and

a method of treating an arrhythmia of the heart comprising the step of: epicardially approaching a selected region of the heart using with a cooling device; placing the cooling device on the surface portion of the heart; and using the cooling device to cool selected cardiac nerves to a temperature below -30 degrees Celsius (col. 7, lines 31-54, col. 15, lines 64-col. 16, line 45 and col. 17, lines 8-col. 18, line 3).

Claims 1, 2, 4, 7 and 11-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Avitall (5,733,280). Avitall discloses a method of treating an arrhythmia of the heart comprising the step of cooling selected cardiac nerves to -40 degrees Celsius for approximately 90 seconds, wherein the nerves are approached epicardially (abstract, col. 1, lines 5-16, col. 2, line 50-col. 3, line 2, col. 4, line 33-col. col. 6, line 11, col. 11, line 45-col. 7, line 23 and col. 10, lines 40-col. 11, line 12).

Art Unit: 3739

Claims 1-3, 6, 8 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Webster, Jr. et al. (6,292,695).

As to claims 1-3 and 6, Webster, Jr. et al. disclose a method of treating an arrhythmia of the heart comprising the step of cooling selected cardiac nerves approached endocardially; wherein the selected cardiac nerves include nerves associated with a posterior surface of the left atrium of the heart; and wherein the selected cardiac nerves include sympathetic nerves proximate the Ligament of Marshall (col. 1, lines 13-16, col. 2, line 46-col. 3, line 42, col. 4, lines 20-37, col. 10, lines 6-67, col. 12, lines 21-29 and claim 43).

As to claims 8 and 9, Webster, Jr. et al. disclose the selected cardiac nerves are stunned so that nerve signal conduction is temporarily inhibited; and wherein the selected cardiac nerves are ablated so that nerve signal conduction is permanently inhibited (col. 12, lines 12-28).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dobak et al. Although Dobak et al. fails to specifically disclose the step of cooling has a duration of 15-120 seconds, the examiner maintains that it would have been obvious to a skillful

Art Unit: 3739

artisan to determine the cooling time by simple or without undue experimentation, and that the duration time would obviously lie between this broad, therefore, non-critical range.

Conclusion

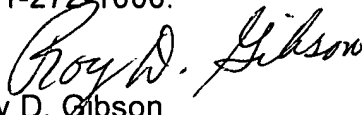
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Reu et al. (6,755,822) disclose a device and method for the creation of cryogenic lesions in veins of the heart.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Roy D. Gibson whose telephone number is 571-272-4767. The examiner can normally be reached on Tu-Th, 7:30 am-4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda Dvorak can be reached on 571-272-4764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3739

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Roy D. Gibson
Primary Examiner
Art Unit 3739

March 13, 2007